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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,790	08/21/2001	Timothy J. Moulsley	GB 000139	6733

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EXAMINER	
AMINZAY, SHAIMA Q	
ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/933,790	MOULSLEY ET AL.	
	Examiner	Art Unit	
	Shaima Q. Aminzay	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The following office action is in response to Amendment, filed August 25, 2004.

Claims 1-20 original, and claims 1-20 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action

> (a) Patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made

1. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah et al. U. S. Patent number 6587672, and in view of Muller U. S. Patent number 6490461.

Regarding claims 1, Chuah teaches transferring information in units over a wireless digital communications link (see for example, Figure 1, 8) between a transmitting station (see for example, Figure 1, Node-b (6)) and a receiving station (see for example, Figure 1, mobile (2)), and transmitting first information

units at a first power level (see for example, column 8, lines 20-24, the first information is being transmitted), and transmitting second information units associated with the first information units (see for example, column 8, lines 39-44, the second information associated with the first information is transmitted), for which first information units did not indicate correct reception occurred (see for example, column 8, lines 20-39), at a second power level which is controlled on the basis of the disparity between target and actual quality of reception parameters for said second information units (see for example, column 8, lines 35-46, based on the two threshold (DThresh1 and PThresh1) the first and second power level reception quality is controlled), wherein the target quality of reception parameter for said second information units is different to the target quality of reception parameter for said first information units (see for example, column 8, lines 35-52, the power level is different, for example increasing to 1dB), the second information units allowing the content of the first information units to be established (see for example, column 8, lines 45-50).

However, Chuah does not teach monitoring means for monitoring if correct reception of the transmitted units occurred at the receiver.

Muller teaches monitoring means for monitoring if correct reception of the transmitted units occurred at the receiver (see for example, column 2, lines 55-56, and lines 23-36, the controller monitors the transmission).

It would have been obvious to one of ordinary skill in the art at the time invention was made to combine Muller's wireless communication system power

monitoring method and apparatus (Muller, column 1, lines 6-8) with Chuah's power detection in a receiver of a wireless system such as Universal Mobile Telecommunications System (Chuah, column 1, lines 19-20) to provide the wireless system such as UMTS with multi-detection of receiving and transmitting communications signals (Chuah, column 1, lines 15-20, and lines 49-54), and to provide a system that "each mobile station is continually monitored to ensure that its power levels are high enough to provide good transmission quality yet no higher than necessary to provide that transmission quality and no higher than will create unreasonable interference with other mobile station communications" (Muller, column 2, lines 50-55).....

Regarding claims 12, Chuah teaches a digital wireless communications system (see for example, Figure 1) comprising at least one transmitter (see for example, Figure 1, Node-B (6)) having means for transmitting (see for example, column 6, lines 11-19; processor description, and column 6, lines 1-5) first information units at a first power level (see for example, column 8, lines 12-15, and Figure 8C, Frame 0, and Frame 1), and at least one receiver (see for example, Figure 1, mobile (2)) having means for receiving the transmitted information units (see for example, column 6, lines 11-19; processor description, and column 6, lines 1-5); control means for controlling the transmitter output power (see for example, Figure 1, Radio Network Controller (RNC), column 2, lines 2-5), and the transmitting means transmits second information units

associated with the first information units (see for example, column 8, lines 35-43, and Figure 8C, Frame 1), for which first information units does not indicate correct reception has occurred (see for example, column 8, lines 35-43), and the second information units being transmitted at a second power level which is controlled on the basis of the disparity between target and actual quality of reception parameters for said second information units (see for example, column 8, lines 35-50), and the target quality of reception parameter for said second information units is different to the target quality of reception parameter for said first information units (see for example, column 8, lines 35-43, and Figure 8C, Frame 1), and the second information units allowing the content of the first information units to be established (see for example, column 8, lines 35-52).

However, Chuah does not teach monitoring means for monitoring if correct reception of the transmitted units occurred at the receiver.

Muller teaches monitoring means for monitoring if correct reception of the transmitted units occurred at the receiver (see for example, column 2, lines 55-56, and lines 23-36, the controller monitors the transmission).

It would have been obvious to one of ordinary skill in the art at the time invention was made to combine Muller's wireless communication system power monitoring method and apparatus (Muller, column 1, lines 6-8) with Chuah's power detection in a receiver of a wireless system such as Universal Mobile Telecommunications System (Chuah, column 1, lines 19-20) to provide the wireless system such as UMTS with multi-detection of receiving and transmitting

communications signals (Chuah, column 1, lines 15-20, and lines 49-54), and to provide a system that "each mobile station is continually monitored to ensure that its power levels are high enough to provide good transmission quality yet no higher than necessary to provide that transmission quality and no higher than will create unreasonable interference with other mobile station communications" (Muller, column 2, lines 50-55).

Regarding claims 16, and 20, Chuah teaches a transmitter and a receiver (see for example, Figure 1), a receiver (see for example, Figure 1, mobile (2)) for use in a digital wireless communications system comprising at least one transmitter (see for example, Figure 1, Node-b (6)) having means for transmitting first information units at a first power level (see for example, column 8, lines 20-24, the first information is being transmitted), and the receiver having means for receiving the transmitted information units (see for example, column 6, lines 11-19; processor description, and column 6, lines 1-5), and control means for controlling the transmitter output power (see for example, Figure 1, Radio Network Controller (RNC), column 2, lines 2-5), and the transmitter transmits second information units associated with the first information units for which first information units (see for example, column 8, lines 39-44, the second information associated with the first information is transmitted, and does not indicate correct reception has occurred at a second power level which is controlled on the basis of the disparity between target and actual quality of reception parameters for said

second information units (see for example, column 8, lines 35-50), and the target quality of reception parameter for said second information units is different to the target quality of reception parameter for said first information units (see for example, column 8, lines 35-43, and Figure 8C, Frame 1), the second information units allowing the content of the first information units to be established (see for example, column 8, lines 35-52).

However, Chuah does not teach monitoring means for monitoring if correct reception of the transmitted units occurred at the receiver.

Muller teaches monitoring means for monitoring if correct reception of the transmitted units occurred at the receiver (see for example, column 2, lines 55-56, and lines 23-36, the controller monitors the transmission).

It would have been obvious to one of ordinary skill in the art at the time invention was made to combine Muller's wireless communication system power monitoring method and apparatus (Muller, column 1, lines 6-8) with Chuah's power detection in a receiver of a wireless system such as Universal Mobile Telecommunications System (Chuah, column 1, lines 19-20) to provide the wireless system such as UMTS with multi-detection of receiving and transmitting communications signals (Chuah, column 1, lines 15-20, and lines 49-54), and to provide a system that "each mobile station is continually monitored to ensure that its power levels are high enough to provide good transmission quality yet no higher than necessary to provide that transmission quality and no higher than will create unreasonable interference with other mobile station communications"

(Muller, column 2, lines 50-55).

Regarding claims 2, 13, and 17, Chuah and Muller teach claims 1, 12, 16, and Chuah further teaches the target quality of reception parameter for the second information units is greater than the target quality of reception parameter for the first information units (see for example, column 4, lines 46-63).

Regarding claim 3, Chuah and Muller teach claims 1, and Muller further teaches quality of reception parameter is chosen on the basis of a target bit error rate or block error rate in the information received (see for example, column 5, lines 41-50).

Regarding claim 4, Chuah and Muller teach claim 1, and Muller further teaches the quality of reception parameter is the signal to interference (see for example, column 2, lines 60-65, and column 4, lines 59-60).

Regarding claim 5, Chuah and Muller teach claim 1, and Muller further teaches the actual and target quality of reception parameters of received information unit transmissions and decreasing the information unit transmission power level if the quality of reception parameter for received information unit transmissions is greater than the target quality of reception parameter (see for example, column 4, lines 46-54), otherwise increasing the information unit

transmission power level if the quality of reception parameter for received information unit transmissions is less than the target quality of reception parameter (see for example, column 4, lines 54-63, and 46-49).

Regarding claim 6, Chuah and Muller teach claim 1, and Chuah further teaches the communications link is established by equipment operating in accordance with a communications protocol based on the Universal Mobile Telecommunication System (see for example, column 2, lines 25-26, and lines 53-61).

Regarding claim 7, Chuah and Muller teach claim 6, and Chuah further teaches the communications link is established on at least one physical channel (see for example, column 2, lines 25-28).

Regarding claim 8, Chuah and Muller teach claim 7, and Muller further teaches the transmit power control (TPC) field carried on a control channel set up in the communications link (see for example, column 1, lines 28-30, and column 2, lines 62-65).

Regarding claim 9, Chuah and Muller teach claim 1, and Chuah further teaches the probability of failed first information units transmission and consequent second information units transmission (see for example, column 10,

lines 55-62).

Regarding claim 10, 14, and 18, Chuah and Muller teach claims 1, 16, and Chuah further teaches maintain a minimum average power consumption (see for example, column 10, lines 19-30).

Regarding claims 11, 15, and 19, Chuah and Muller teach claims 1, 12, 16, and Chuah further teaches the second information unit transmissions are performed using an initial transmission power boost without reference to the quality of reception parameter (see for example, column 4, lines 39-42).

Response to Arguments

2. Applicant's arguments filed August 25, 2004 have been fully considered but they are not persuasive.

3. The applicant's argued features in the claims, i.e., providing a digital wireless communications system transferring information in units over a wireless digital communications link between a transmitting station and a receiving station comprising transmitter(s) for transmitting information units at a first power level, and receiver(s) for receiving the transmitted information units, and controller for controlling the transmitter output power and monitoring means for monitoring the

reception of the transmitted units at the receiver for receiving correct information, and if indicate correct reception does not occurred, the transmitter transmits second information units associated with the first information units, the second information units being transmitted at a second power level which is controlled between target and actual quality of reception parameters for the second information units, and the target quality of reception parameter for the second information units is different to the target quality of reception parameter for the first information units, the second information units allowing the content of the first information units to be established read upon Chuah (Chuah et al.) in view of Muller as follows.

Chuah discloses a wireless communication system related to Universal Mobile Telecommunication System (UMTS), the radio access network based on CDMA having transmitter, receiver, and controlling means to provide detection of receiving and transmitting power level between the base(s) and mobile station(s), disclosing the limitations "digital wireless communications system comprising at least one transmitter having means for transmitting first information units at a first power level; at least one receiver having means for receiving the transmitted information units; control means for controlling the transmitter output power". Chuah uses data packets for transmission information and detecting transmission power levels, actual and target values, determining correct reception, if indication of not receiving correct reception, the transmission adjusted accordingly, therefore, Chuah discloses the limitation of "monitoring if

correct reception of the transmitted units occurred at the receiver, wherein the transmitting means transmits second information units associated with the first information units for which first information units the monitoring means does not indicate correct reception has occurred, the second information units being transmitted at a second power level which is controlled on the basis of the disparity between target and actual quality of reception parameters for said second information units, wherein the target quality of reception parameter for said second information units is different to the target quality of reception parameter for said first information units, the second information units allowing the content of the first information units to be established". Chuah does not specifically discloses monitoring mean, however, Chuah discloses detecting and monitoring correct reception, implying monitoring means. The implication leaded to search for similar reference, such as Muller. Muller discloses a wireless communication system and transmission power control affecting mobile and base station communications, and having monitoring means for monitoring correct reception. Chuah and Muller are both analogous to the applicants teaching, that's why they do obviate.

Therefor, Examiner believes the claims are broad enough to combining Muller's wireless communication system power monitoring means and method with Chuah's wireless communications system transmission power detection to provide a wireless communication system with multi-detection and continuously

monitoring power levels for high quality transmission.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 703-305-8723. The examiner can normally be reached on 7:00 AM -5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shaima Q. Aminzay
(Examiner)

NICK CORSARO
PRIMARY EXAMINER

Nay Maung
(SPE)
Art Unit 2684

January 5, 2005